



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706 • (208) 373-0502
www.deq.idaho.gov

Governor Brad Little
Director John H. Tippetts

January 18, 2019

Brent Struhs, Blackfoot Facility Manager
Blackfoot Facility of Basic American Foods
415 W. Collins Road
Blackfoot, ID 83221

RE: Facility ID No. 011-00012, Blackfoot Facility of Basic American Foods, Blackfoot
Final Permit Letter, DEQ Initiated Permit Reissuance

Dear Mr. Struhs:

The Department of Environmental Quality (DEQ) is reissuing Permit to Construct (PTC) No. P-2017.0011 to Blackfoot Facility of Basic American Foods to correct couple typographical errors. The typographical errors were in Permit Condition 2.14.1 and 2.14.4 and have been corrected.

This permit is effective immediately and replaces PTC No. P-2017.0011, issued on July 31, 2017. This permit does not release Blackfoot Facility of Basic American Foods from compliance with all other applicable federal, state, or local laws, regulations, permits, or ordinances. The accompanying Statement of Basis document remains unchanged.

In order to fully understand the compliance requirements of this permit, DEQ highly recommends that you schedule a meeting with Melissa Gibbs, Regional Air Quality Manager, at (208) 236-6160 to review and discuss the terms and conditions of this permit. Should you choose to schedule this meeting, DEQ recommends that the following representatives attend the meeting: your facility's plant manager, responsible official, environmental contact, and any other staff responsible for day-to-day compliance with permit conditions.

Pursuant to IDAPA 58.01.23, you, as well as any other entity, may have the right to appeal this final agency action within 35 days of the date of this decision. However, prior to filing a petition for a contested case, I encourage you to contact Shawnee Chen at (208) 373-0502 or Shawnee.chen@deq.idaho.gov to address any questions or concerns you may have with the enclosed permit.

Sincerely,

A handwritten signature in black ink, appearing to read "Mike Simon".

Mike Simon
Stationary Source Program Manager
Air Quality Division

MS/syc

Enclosure

Permit No. P -2017.0011 Project 62167

Air Quality

PERMIT TO CONSTRUCT

Permittee	Blackfoot Facility of Basic American Foods
Permit Number	P-2017.0011
Project ID	62167
Facility ID	011-00012
Facility Location	415 West Collins Road Blackfoot, ID 83221

Permit Authority

This permit (a) is issued according to the "Rules for the Control of Air Pollution in Idaho" (Rules), IDAPA 58.01.01.200–228; (b) pertains only to emissions of air contaminants regulated by the State of Idaho and to the sources specifically allowed to be constructed or modified by this permit; (c) has been granted on the basis of design information presented with the application; (d) does not affect the title of the premises upon which the equipment is to be located; (e) does not release the permittee from any liability for any loss due to damage to person or property caused by, resulting from, or arising out of the design, installation, maintenance, or operation of the proposed equipment; (f) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; and (g) in no manner implies or suggests that the Idaho Department of Environmental Quality (DEQ) or its officers, agents, or employees assume any liability, directly or indirectly, for any loss due to damage to person or property caused by, resulting from, or arising out of design, installation, maintenance, or operation of the proposed equipment. Changes in design, equipment, or operations may be considered a modification subject to DEQ review in accordance with IDAPA 58.01.01.200–228.

Date Issued January 18, 2019



Shawnee Chen, P.E., Permit Writer



Mike Simon, Stationary Source Manager

Contents

1 Permit Scope.....3

2 Production Line C-84

3 General Provisions.....9

1 Permit Scope

Purpose

- 1.1 This is the initial permit to construct (PTC) for Production Line C-8 at the Blackfoot Facility of Basic American Foods. Production Line C-8 is part of Process C at the facility.

Regulated Sources

Table 1.1 lists all sources of regulated emissions in this permit.

Table 1.1 Regulated Sources

Permit Section	Source	Control Equipment
2	<u>Pre-dryer</u> Manufacturer: Industrial Metal Enterprises Model: custom First stage burner model: Low NOx burner, 25 ppmvd @ 3% O ₂ Manufacturer: Winnox Eclipse Model: CROSSFIRE Heat input rating: 6.0 MMBtu/hr Second stage burner model: Low NOx burner, 20 ppmvd @ 3% O ₂ Manufacturer: Winnox Eclipse Model: WX0200 Heat input rating: 2.0 MMBtu/hr Manufacture date: 4/1/2017 Max. production: 70,000 lb/day finished product Fuel: natural gas	None
	<u>Dryer</u> Manufacturer: Buhler Aeroglide Model: C1 144-132 RGX Burner model: Low-NOx burner, 10 ppmvd @ 3% O ₂ Manufacturer: Winnox Eclipse Model: WX0200 Heat input rating: 5.0 MMBtu/hr Manufacture date: 4/1/2017 Max. production: 70,000 lb/day finished product Fuel: natural gas	<u>Wet Venturi Scrubber</u> Manufacturer: EnviroCare Model: MicroMist Pressure drop across throat at MicroMist Venturi stage: 17 inch H ₂ O Recirculation rate (inlet): 178 gpm Inlet gas flow: 39,700 acfm PM ₁₀ /PM _{2.5} control efficiency: 75.0%
	<u>Air Makeup Unit</u> Manufacturer: Reyco Model: Ventpac 60 Burner Model: Low NOx burner, 25 ppmvd @ 3% O ₂ Burner Manufacturer: Winnox Eclipse Model: CROSSFIRE Manufacture Date: 4/1/2017 Heat input rating: 5.0 MMBtu/hr Fuel: natural gas	None

2 Production Line C-8

2.1 Process Description

Production line C-8 will prepare dried vegetable product from a combination of fresh vegetables and previously dried vegetables. The production line includes a two-stage pre-dryer and a dryer, operating in series. The pre-dryer and dryer will be natural gas fired. The maximum production rate will be 70,000 pounds of finished product per day.

A 5 MMBtu/hr natural gas fired air make-up unit will also be installed to provide comfort heating in the area where the new production line will be located. Room air will be used as intake air for the pre-dryer and dryer; thus, the combustion products from the direct heat transfer air make-up unit will exhaust through the pre-dryer and dryer stacks. Emissions from the air make-up unit are prorated to individual stacks based on the stack air flow rates.

2.2 Control Device Descriptions

A MicroMist® Venturi scrubber will be installed to reduce particulate emissions from the dryer. Particulate emissions from the pre-dryer will be uncontrolled.

Low-NO_x burners will be used for the pre-dryer, dryer, and the air make-up unit. The burners for the air make-up unit and the first-stage pre-dryer will limit NO_x to 25 ppmvd @ 3% O₂. The burner for the second-stage pre-dryer will limit NO_x to 20 ppmvd @ 3% O₂, and the burner for the dryer will limit NO_x to 10 ppmvd @ 3% O₂.

Refer to Table 1.1 for additional control device information.

Emission Limits

2.3 Emission Limits

The emissions from the pre-dryer stack and dryer stack shall not exceed any corresponding emission limits listed in Table 2.1.

Table 2.1 Pre-dryer and Dryer Emission Limits ^(a)

Source Description	PM _{2.5} ^(b)		PM ₁₀ ^(b)	SO ₂		NO _x		CO
	lb/day	T/yr ^(d)	lb/day	lb/hr ^(c)	T/yr ^(d)	lb/hr ^(c)	T/yr ^(d)	lb/hr ^(c)
Pre-dryer stack ^(e)	5.18	0.95	5.59	0.013	0.058	0.289	1.14	1.48
Dryer stack ^(e)	3.10	0.57	3.91	0.022	0.094	0.155	0.47	

- a) In absence of any other credible evidence, compliance is ensured by complying with permit operating, monitoring, and record keeping requirements.
- b) Particulate matter with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers, including condensable particulate as defined in IDAPA 58.01.01.006.
- c) Pounds per hour, as determined by a test method prescribed by IDAPA 58.01.01.157, EPA reference test method, continuous emission monitoring system (CEMS) data, or DEQ-approved alternative.
- d) Tons per any consecutive 12-calendar month period.
- e) Including the emissions from the 5 MMBtu/hr air make-up

2.4 Opacity Limit

Emissions from the pre-dryer stack and dryer stack, or any other stack, vent, or functionally equivalent opening associated with the pre-dryer stack and dryer stack, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

Operating Requirements

2.5 Allowable Maximum Steam Usage

The steam used for the new production line shall not exceed 920 lb/hr.

2.6 Allowable Fuel Types

The pre-dryer, dryer, and air makeup unit shall burn natural gas exclusively.

2.7 Finished Product Production Rate Limit

2.7.1 The finished product (i.e., dried vegetable product) shall not exceed 70,000 lb/day until the new emission factors based on source test on each stack are approved by DEQ.

2.7.2 Once the new emission factors based on source test on each stack are approved by DEQ, emissions of PM_{2.5} and PM₁₀ shall be calculated by multiplying measured production by the emission factor, as set forth in Permit Condition 2.11. Emissions of PM_{2.5} and PM₁₀ shall not exceed the emission limits established in Table 2.1.

2.8 Low NOx Burner Requirements

The permittee shall use low NOx burners for the following emissions units. The NOx emissions shall not exceed the NOx concentration as specified in the following:

- Air makeup unit burner – 25 ppmvd @ 3% O₂
- First stage burner of the pre-dryer – 25 ppmvd @ 3% O₂
- Second stage burner of the pre-dryer - 20 ppmvd @ 3% O₂
- Dryer burner - 10 ppmvd @ 3% O₂

2.9 Venturi Scrubber Operating Requirements

2.9.1 The permittee shall install and operate a Venturi scrubber to control emissions from the dryer.

2.9.2 The scrubber's operating parameters shall be maintained as follows:

- The pressure drop across the throat at MicroMist Venturi stage of the scrubber shall be equal to or greater than the pressure drop obtained during the most recent performance test demonstrating compliance with the emissions limits. Until an initial performance test demonstrating compliance with emissions limits is completed, the pressure drop shall be maintained at 17 inches of water or greater.
- Scrubbing liquid recirculation rate shall be equal to or greater than the recirculation rate obtained during the most recent performance test demonstrating compliance with the emissions limits. Until an initial performance test demonstrating compliance with emissions limits is completed, the scrubbing liquid recirculation rate shall be greater than or equal to 178 gallons per minute.

2.9.3 The permittee shall operate the following monitoring devices:

- A device to continuously measure the pressure drop across the throat at MicroMist Venturi stage of the scrubber in inches of water.

- A device to continuously measure the scrubbing liquid recirculation rate (inlet) to the Venturi scrubber in gallons per minute.

Monitoring and Recordkeeping Requirements

2.10 Allowable Maximum Steam Monitoring

To demonstrate compliance with the Allowable Maximum Steam Limit of the permit, the permittee shall monitor and record the steam usage for the new production line hourly.

2.11 PM_{2.5} and PM₁₀ Compliance Demonstration

- 2.11.1 Prior to the new emission factors based on source test on each stack are approved by DEQ, the permittee shall monitor and record the daily finished product produced from production line C-8 to demonstrate compliance with the finished product production rate limit in Permit Condition 2.7.1.
- 2.11.2 Daily production records may be maintained on a work-day basis, in which a work day commences at a specific time of day.
- 2.11.3 Once the new emission factors based on source test on each stack are approved by DEQ, the permittee shall monitor and record the daily finished product produced from production line C-8 to demonstrate compliance with the PM_{2.5} and PM₁₀ emission limits contained in Table 2.1. compliance with the particulate emission limits in Table 2.1 shall be demonstrated by calculation in which the amount of finished product is multiplied by an approved production-based emission factor, in accordance with the following formula:

$$E_i = EF_i * P_i$$

Where:

E_i = emissions, lb from stack i for the calculation period

EF_i = emission factor for stack i, lb pollutant/1000 lb finished product

P = thousands of pounds of finished product for the calculation period

- 2.11.4 Compliance with the annual limits shall be based on a rolling 12-month average. Each month shall be a calendar month.
- 2.11.5 Emission factors for each stack shall be determined from the most recent performance test for each stack or as otherwise approved by DEQ.
- 2.11.6 PM₁₀ and PM_{2.5} emission records and calculations shall be maintained on site for the most recent five-year period and shall be made available to DEQ representatives upon request.
- 2.11.7 Records of stack testing and the determination of emission factors shall be maintained until such time as a revised emission factor is established. Records may be maintained in electronic format.

2.12 Low NOx Burner Requirements Recordkeeping

The permittee shall maintain documentation showing that the burners of the air makeup unit, pre-dryer, and dryer meet Low NOx Burner Requirements of the permit. Manufacturer or vendor technical specifications for installed equipment are acceptable documentation.

2.13 Venturi Scrubber Operating Requirements Monitoring

The permittee shall monitor and record the following parameters:

- The pressure drop across the throat at MicroMist Venturi stage of the scrubber in inches of water once per operating shift.
- The scrubbing liquid recirculation rate in gallons per minute weekly.

Performance Testing Requirements

2.14 Initial Performance Test for NO_x, PM_{2.5}, and PM₁₀

2.14.1 Within 180 days after startup of the new production line, the permittee shall conduct a performance test on the pre-dryer and dryer respectively to demonstrate compliance with the NO_x, PM_{2.5}, and PM₁₀ emission limits in Permit Condition 2.3, to verify the maximum steam usage for production line C-8 in Permit Condition 2.5, to determine revised emission factors for PM_{2.5} and PM₁₀, and to identify a minimum scrubbing liquor flow rate and a minimum pressure drop across the throat at MicroMist Venturi stage. The permittee is encouraged to submit a source testing protocol for approval 30 days prior to conducting the performance test.

2.14.2 The permittee shall test in accordance with the requirements of IDAPA 58.01.01.157.02(a) which require that testing must be conducted under operational conditions specified in the applicable state or federal regulation, rule, permit, order, consent decree or by Department approval. If the operational requirements are not specified, the source should test at worst-case normal operating conditions. Worst-case normal conditions are those conditions of fuel type, and moisture, process material makeup and moisture and process procedures which are changeable or which could reasonably be expected to be encountered during the operation of the facility and which would result in the highest pollutant emissions from the facility. A description of how the process operating conditions achieved during testing satisfy these requirements shall be included in the final test report.

In addition, the permittee shall test in accordance with other requirements in IDAPA 58.01.01.157 and General Provisions of this permit which contain notification, testing procedures and reporting requirements for testing.

2.14.3 The permittee shall monitor and record the following parameters during each performance test:

For testing the pre-dryer:

- The steam usage in lb a minimum of once every 15 minutes
- The finished product in lb a minimum of once every 15 minutes

For testing the dryer:

- The steam usage in lb a minimum of once every 15 minutes
- The finished product in lb a minimum of once every 15 minutes
- The pressure drop across the throat at MicroMist venture stage of the scrubber in inches of water a minimum of once every 15 minutes

- The scrubbing liquid recirculation rate in gallons per minute a minimum of once every 15 minutes

2.14.4 Reserved

2.14.5 The test report shall include a calculation of emission factors for $PM_{2.5}$ and PM_{10} (in lb/1000 lb finished product).

2.14.6 The test report shall include a calculation of scrubbing liquid recirculation rate and the pressure drop across the throat at MicroMist Venturi stage during the stack test.

2.14.7 All calculations using operating data during the test shall use 15-minute block averages, with averaging conducted for the duration of a given sample run.

2.15 Subsequent Performance Test for $PM_{2.5}$

Periodic performance tests shall be conducted according to the following schedule:

- If the emissions measured during the most recent performance test are less than or equal to 75% of the $PM_{2.5}$ emission limit in Permit Condition 2.3, a subsequent performance test shall be conducted within five years of the most recent test date, or DEQ approved alternative schedule.
- If the emissions measured during the most recent performance test are greater than 75%, but less than or equal to 90% of the $PM_{2.5}$ emission limit in Permit Condition 2.3, a subsequent performance test shall be conducted within two years of the most recent test date.
- If the emissions measured during the most recent performance test are greater than 90% of the $PM_{2.5}$ emission limit in Permit Condition 2.3, a subsequent performance test shall be conducted within 13 months of the most recent test date.
- The permittee may conduct additional voluntary stack testing for any purpose, including updating the emission factor used in emission calculations. Any testing to update the emission factor shall comply with the performance testing requirements of this permit.

3 General Provisions

General Compliance

- 3.1** The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit and the "Rules for the Control of Air Pollution in Idaho." The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit, the "Rules for the Control of Air Pollution in Idaho," and the Environmental Protection and Health Act (Idaho Code §39-101, et seq).

[Idaho Code §39-101, et seq.]

- 3.2** The permittee shall at all times (except as provided in the "Rules for the Control of Air Pollution in Idaho") maintain in good working order and operate as efficiently as practicable all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.

[IDAPA 58.01.01.211, 5/1/94]

- 3.3** Nothing in this permit is intended to relieve or exempt the permittee from the responsibility to comply with all applicable local, state, or federal statutes, rules, and regulations.

[IDAPA 58.01.01.212.01, 5/1/94]

Inspection and Entry

- 3.4** Upon presentation of credentials, the permittee shall allow DEQ or an authorized representative of DEQ to do the following:

- Enter upon the permittee's premises where an emissions source is located, emissions-related activity is conducted, or where records are kept under conditions of this permit;
- Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;
- Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
- As authorized by the Idaho Environmental Protection and Health Act, sample or monitor, at reasonable times, substances or parameters for the purpose of determining or ensuring compliance with this permit or applicable requirements.

[Idaho Code §39-108]

Construction and Operation Notification

- 3.5** This permit shall expire if construction has not begun within two years of its issue date, or if construction is suspended for one year.

[IDAPA 58.01.01.211.02, 5/1/94]

- 3.6** The permittee shall furnish DEQ written notifications as follows:

- A notification of the date of initiation of construction, within five working days after occurrence; except in the case where pre-permit construction approval has been granted then notification shall be made within five working days after occurrence or within five working days after permit issuance whichever is later;

- A notification of the date of any suspension of construction, if such suspension lasts for one year or more;
- A notification of the anticipated date of initial start-up of the stationary source or facility not more than sixty days or less than thirty days prior to such date;
- A notification of the actual date of initial start-up of the stationary source or facility within fifteen days after such date; and
- A notification of the initial date of achieving the maximum production rate, within five working days after occurrence - production rate and date.

[IDAPA 58.01.01.211.03, 5/1/94]

Performance Testing

- 3.7** If performance testing (air emissions source test) is required by this permit, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test date or shorter time period as approved by DEQ. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests that such testing not be performed on weekends or state holidays.
- 3.8** All performance testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, at least 30 days prior to conducting any performance test, the permittee is encouraged to submit a performance test protocol to DEQ for approval. The written protocol shall include a description of the test method(s) to be used, an explanation of any or unusual circumstances regarding the proposed test, and the proposed test schedule for conducting and reporting the test.
- 3.9** Within 60 days following the date in which a performance test required by this permit is concluded, the permittee shall submit to DEQ a performance test report. The written report shall include a description of the process, identification of the test method(s) used, equipment used, all process operating data collected during the test period, and test results, as well as raw test data and associated documentation, including any approved test protocol.

[IDAPA 58.01.01.157, 4/5/00 and 4/11/15]

Monitoring and Recordkeeping

- 3.10** The permittee shall maintain sufficient records to ensure compliance with all of the terms and conditions of this permit. Monitoring records shall include, but not be limited to, the following: (a) the date, place, and times of sampling or measurements; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to DEQ representatives upon request.

[IDAPA 58.01.01.211, 5/1/94]

Excess Emissions

- 3.11** The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130–136 for excess emissions due to start-up, shut-down, scheduled maintenance, safety measures, upsets, and breakdowns.

[IDAPA 58.01.01.130–136, 4/5/00]

Certification

- 3.12** All documents submitted to DEQ—including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certification—shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.

[IDAPA 58.01.01.123, 5/1/94]

False Statements

- 3.13** No person shall knowingly make any false statement, representation, or certification in any form, notice, or report required under this permit or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.125, 3/23/98]

Tampering

- 3.14** No person shall knowingly render inaccurate any monitoring device or method required under this permit or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.126, 3/23/98]

Transferability

- 3.15** This permit is transferable in accordance with procedures listed in IDAPA 58.01.01.209.06.

[IDAPA 58.01.01.209.06, 4/11/06]

Severability

- 3.16** The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

[IDAPA 58.01.01.211, 5/1/94]